

IN THE CLAIMS:

1. (Canceled)

2. (Currently Amended) A portable telephone comprising a display device, the display device comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;

a second thin film transistor comprising at least two thin film transistors ; and

an electroluminescence element comprising an organic layer interposed between a pair of electrodes,

wherein one of the pair of electrodes is electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises at least two channel regions in an active layer, at least two gate electrodes corresponding to the channel regions, over the active layer with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions, and

wherein ~~at least the~~ the at least two thin film transistors and the electroluminescence element are connected in series.

3. (Currently Amended) A portable telephone according to claim 2,

wherein each of the first and second thin film transistors has at least one lightly doped impurity region between a channel region and at least one of a drain region or the impurity region;

~~wherein the lightly doped impurity region of the first thin film transistor does not overlap the gate electrodes of the first thin film transistor; and~~

~~wherein the lightly doped impurity region of the second thin film transistor overlaps the gate electrode of the second thin film transistor at least partly.~~

4. (Previously Presented) A portable telephone according to claim 2,
wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

5.-11. (Canceled)

12. (Withdrawn) A portable telephone comprising a display device, the display device comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;

a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

an electroluminescence element comprising an organic layer interposed between a pair of electrodes,

wherein one of the pair of electrodes is electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises at least two gate electrodes over the substrate, at least two channel regions corresponding to the gate electrode, over the gate electrode with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions, and

wherein the impurity region has the same impurity concentration as a source or drain region of the first thin film transistor.

13. (Withdrawn) A portable telephone according to claim 12,
wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

14. (Withdrawn) A portable telephone according to claim 12,
wherein an equation of $W2/L2 \geq 5 \times W1/L1$ is established where a channel length of the second thin film transistor is L2, a channel width of the second thin film transistor is W2, a channel length of the first thin film transistor is L1 and a channel width of the first thin film transistor is W1.

15. (Withdrawn) A portable telephone according to claim 12,
wherein a channel length of the second thin film transistor (L2) is 0.1 to 50 μm , a channel width of the second thin film transistor (W2) is 0.5 to 30 μm , a channel length of the first thin film transistor (L1) is 0.2 to 18 μm and a channel width of the first thin film transistor (W1) is 0.1 to 5 μm .

16. (Withdrawn) A portable telephone according to claim 12,
wherein the substrate comprises a material selected from the group consisting of glass, glass ceramic, quartz, silicon, ceramic, metal, and plastic.

17. (Withdrawn) A portable telephone comprising a display device, the display device comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;

a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

an electroluminescence element comprising an organic layer interposed between a pair of electrodes,

wherein one of the pair of electrodes is electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises at least two gate electrodes over the substrate, at least two channel regions corresponding to the gate electrode, over the gate electrode with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions,

wherein a channel width of the second thin film transistor is greater than a channel width of the first thin film transistor, and

wherein the impurity region has the same impurity concentration as a source or drain region of the first thin film transistor.

18. (Withdrawn) A portable telephone according to claim 17,
wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

19. (Withdrawn) A portable telephone according to claim 17,
wherein the substrate comprises a material selected from the group consisting of glass, glass ceramic, quartz, silicon, ceramic, metal, and plastic.

20.-22. (Canceled)

23. (Currently Amended) A portable telephone comprising a display device, the display device comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a switching element comprising an active layer and at least first and second gate electrodes adjacent to the active layer with a gate insulating film interposed therebetween;

a current control element comprising at least two thin film transistors ; and

an electroluminescence element comprising an organic layer interposed between a pair of electrodes,

wherein one of the pair of electrodes is electrically connected to the current control element, and

wherein ~~at least the~~ the at least two thin film transistors and the electroluminescence element are connected in series.

24. (Previously Presented) A portable telephone according to claim 23,
wherein the substrate comprises a material selected from the group consisting
of glass, glass ceramic, quartz, silicon, ceramic, metal, and plastic.

25.-28. (Canceled)

29. (Currently Amended) A portable telephone comprising a display device, the
display device comprising:
a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a switching element comprising at least two thin film transistors;
a current control element comprising at least two thin film transistors ; and
an electroluminescence element comprising an organic layer interposed
between a pair of electrodes,
wherein one of the pair of electrodes is electrically connected to the current control
element, and
wherein ~~at least the~~ the at least two thin film transistors and the electroluminescence
element are connected in series.

30. (Previously Presented) A portable telephone according to claim 29,
wherein the substrate comprises a material selected from the group consisting
of glass, glass ceramic, quartz, silicon, ceramic, metal, and plastic.

31.-32. (Canceled)

33. (Withdrawn) A portable telephone comprising a display device, the display
device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a switching element comprising at least two thin film transistors;
a current control element comprising a gate electrode electrically connected to the switching element; and
an electroluminescence element comprising an organic layer interposed between a pair of electrodes,
wherein one of the pair of electrodes is electrically connected to the current control element, and
wherein each of the switching element and the current control element has at least one lightly doped impurity region between a channel region and at least one of a drain region or an impurity region,
wherein the lightly doped impurity region of the switching element does not overlap a gate electrode of the switching element, and
wherein the lightly doped impurity region of the current control element overlaps the gate electrode of the current control element at least partly.

34. (Withdrawn) A portable telephone according to claim 33,
wherein the substrate comprises a material selected from the group consisting of glass, glass ceramic, quartz, silicon, ceramic, metal, and plastic.

35. (Previously Presented) A portable telephone according to claim 2,
wherein a top surface of the impurity region is entirely in contact with the gate insulating film.

36.-38. (Canceled)

39. (Previously Presented) A portable telephone according to claim 23,
wherein, in a region between the first gate electrode and the second gate electrode, a top surface of the active layer is entirely in contact with the gate insulating film.

40.-41. (Canceled)

42. (Previously Presented) A portable telephone according to claim 29, wherein each of the thin film transistors of the switching element comprises an active layer and a gate electrode with a gate insulating film therebetween, and

wherein, in a region between the gate electrodes of the thin film transistors of the switching element, a top surface of the active layer is entirely in contact with the gate insulating film.

43.-52. (Canceled)

53. (New) An electroluminescence display device comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;

a second thin film transistor comprising at least two channel regions; and

an electroluminescence element comprising an organic layer interposed between a pair of electrodes,

wherein one of the pair of electrodes is electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises at least two channel regions in an active layer, at least two gate electrodes corresponding to the channel regions, over the active layer with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions, and

wherein the at least two thin film transistors in the second thin film transistor and the electroluminescence element are connected in series.

54. (New) An electroluminescence display device according to claim 53,

wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

55. (New) An electroluminescence display device according to claim 53,

wherein the substrate comprises a material selected from the group consisting of glass, glass ceramic, quartz, silicon, ceramic, metal, and plastic.

56. (New) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a first thin film transistor comprising at least two channel regions in a first semiconductor film;
a second thin film transistor comprising at least two channel regions in a second semiconductor film; and
an electroluminescence element comprising an organic layer interposed between a pair of electrodes,
wherein one of the pair of electrodes is electrically connected to the second thin film transistor, and
wherein the at least two thin film transistors in the second semiconductor film and the electroluminescence element are connected in series.

57. (New) An electroluminescence display device according to claim 56,
wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

58. (New) An electroluminescence display device according to claim 56,
wherein the substrate comprises a material selected from the group consisting of glass, glass ceramic, quartz, silicon, ceramic, metal, and plastic.